Introduction to Orthopedics

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Topics to be Cover

- What does Orthopedic mean
- What does it cover
- What are it's subspecialties
- Orthopedic D.D
- Red flags in orthopedics

Definition

Orthopedics

- ORTHO → Straight, Upright, Correct
- Pais → Child



- First used:
 - By Dr.Nicolas Andry
 - A French doctor
 - In 1841
 - For a book titled:

"Orthopedia

The Art to Correct and Prevent Deformities in Children"

Orthopedic Surgery

- It does not mean only bone surgery
- But → musculoskeletal system (MSK)
- It manages MSK → trauma + diseases

Also Known as:

Orthopedic Surgery and Traumatology

What Does It Cover?

Orthopedic Surgery Covers:

- Bones
- Joints
- Muscles
- Tendons
- Ligaments
- Peripheral nerves
- Vertebral column
- Spinal cord and its nerves

What Are It's Subspecialties ?

Orthopedic Sub-Specialties

- 1) Orthopedic trauma
- 2) Pelvic surgery
- 3) Sport surgery
- 4) Reconstructive surgery
- 5) U.L surgery
- 6) Hand surgery
- 7) Arthroplasty
- 8) Pediatric orthopedic
- 9) Spin surgery
- 10) Pediatric spine surgery
- 11) Foot and ankle surgery
- 12)Oncology

Orthopedic Causes for D.D

Orthopedic Causes

- Congenital
- Acquired:
 - 1) Developmental
 - 2) Trauma
 - 3) Infection and Inflammation
 - 4) Metabolic
 - 5) Neuromuscular
 - 6) Degenerative
 - 7) Tumor

Red Flags In Orthopedics

Red Flags In Orthopedics

- Red Flags = Warning <u>Symptom</u> or <u>Sign</u>
- Should <u>always</u> look for them
- Its presence means → the necessity for:

<u>Urgent or different</u> → <u>action or intervention</u>

Will be given → tomorrow

Red Flags In Orthopedics Include:

- Open # → high risk of infection & complications
- Compartment Syndrome → may lose the limb
- Infection → may progress to chronic O.M or joint distruction
- Complicated # → higher morbidity & mortality
- Pelvic #

 massive blood loss & associated injuries
- Multiple trauma

 more than one # or injury sustained at the same time
- Acute joint Dislocations → requires urgent reduction or may cause serious N.V complications
- Cauda equina syndrome \rightarrow damage can be permanent

Any Question?

Remember

Remember

- Orthopedics → is MSK system
- Lots of subspecialties → 12
- Orthopedic D.D → cong., developmental, metabolic, trauma, infection, inflammation, neuromuscular, degenerative, tumor
- Red flags → <u>always</u> look for them